

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P198729

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-1200-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198729
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24285)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV2-AF-02-LED-U-SL4-1200-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11023.3 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 128
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

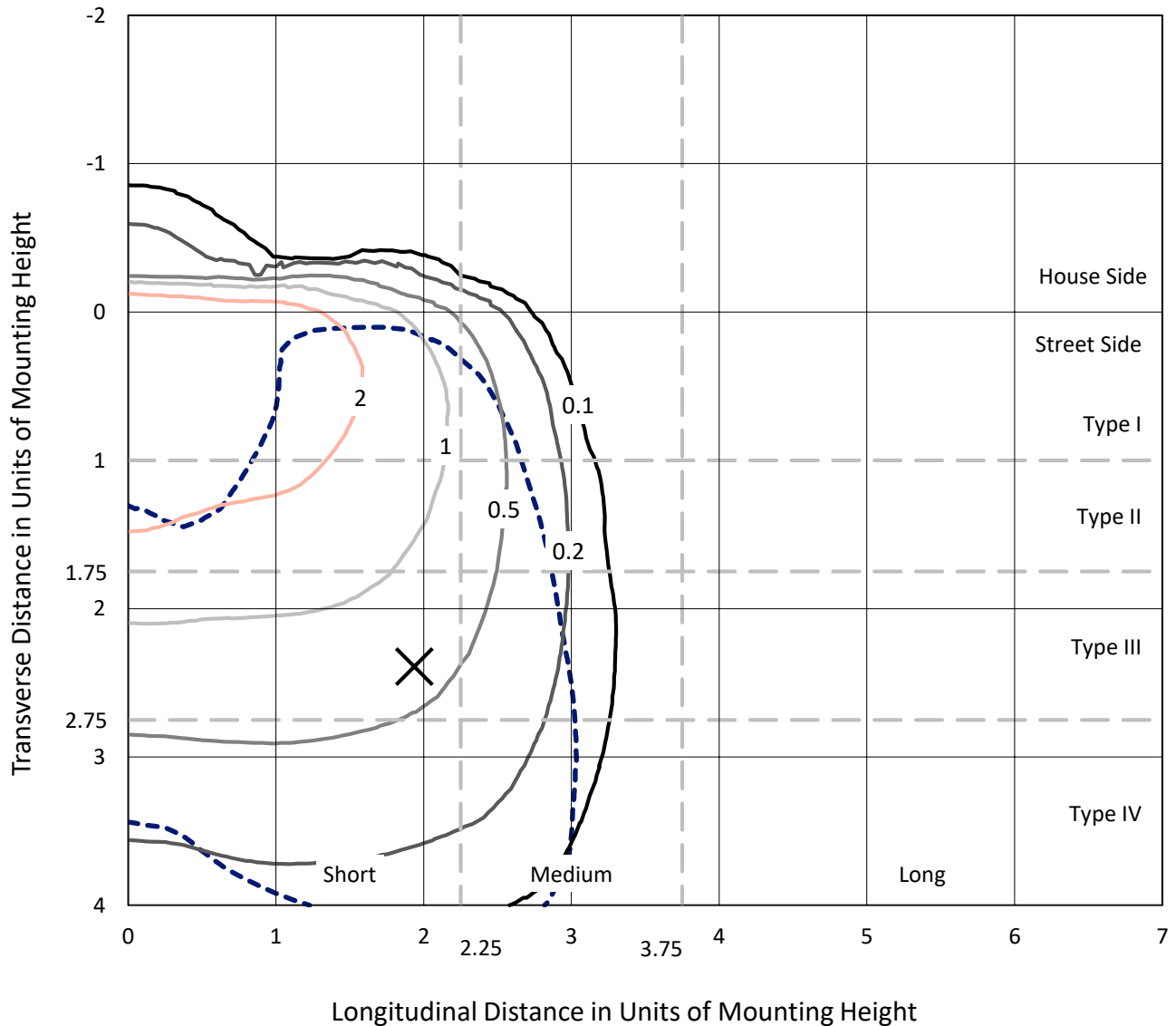


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

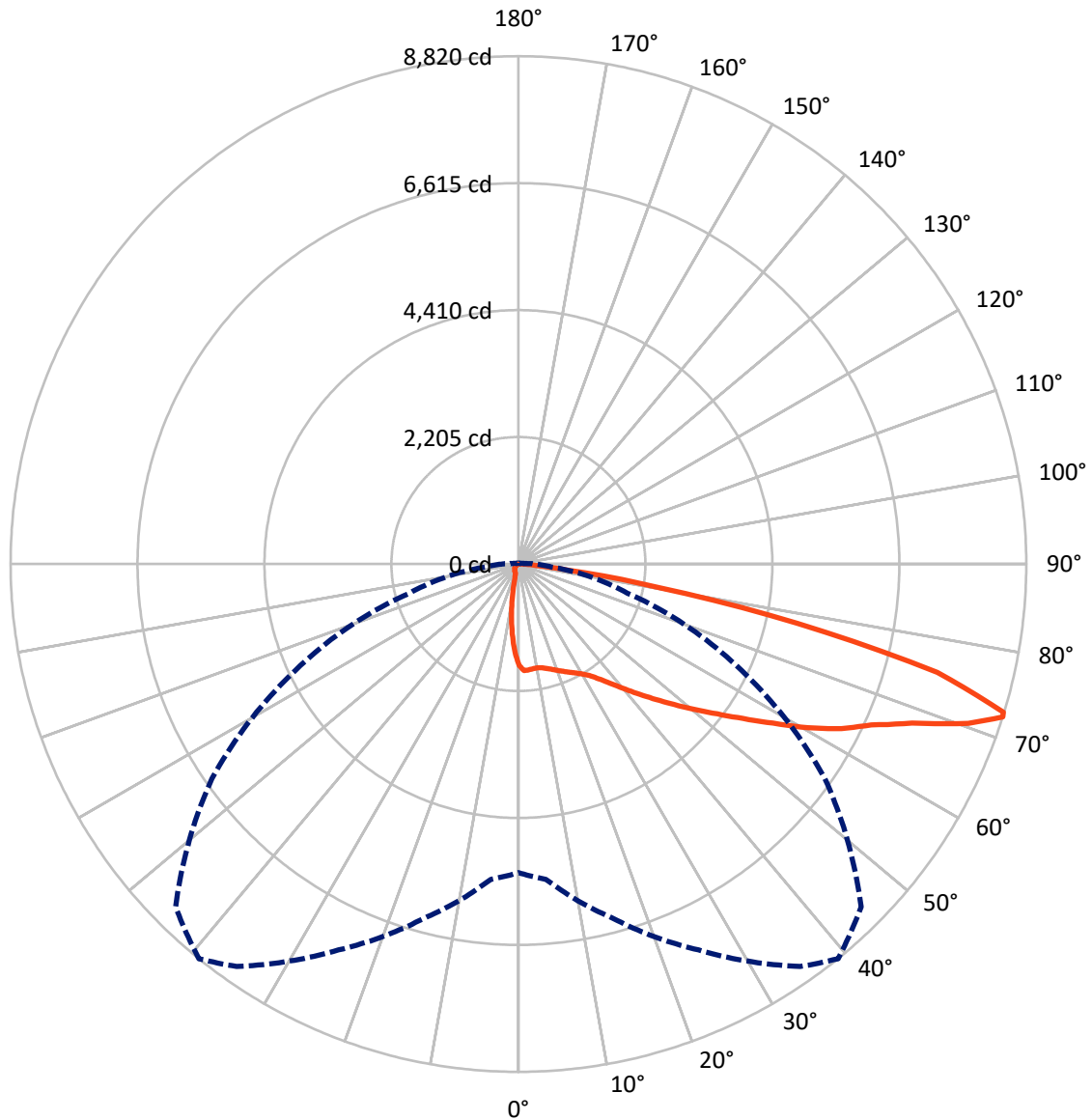


Based on 20 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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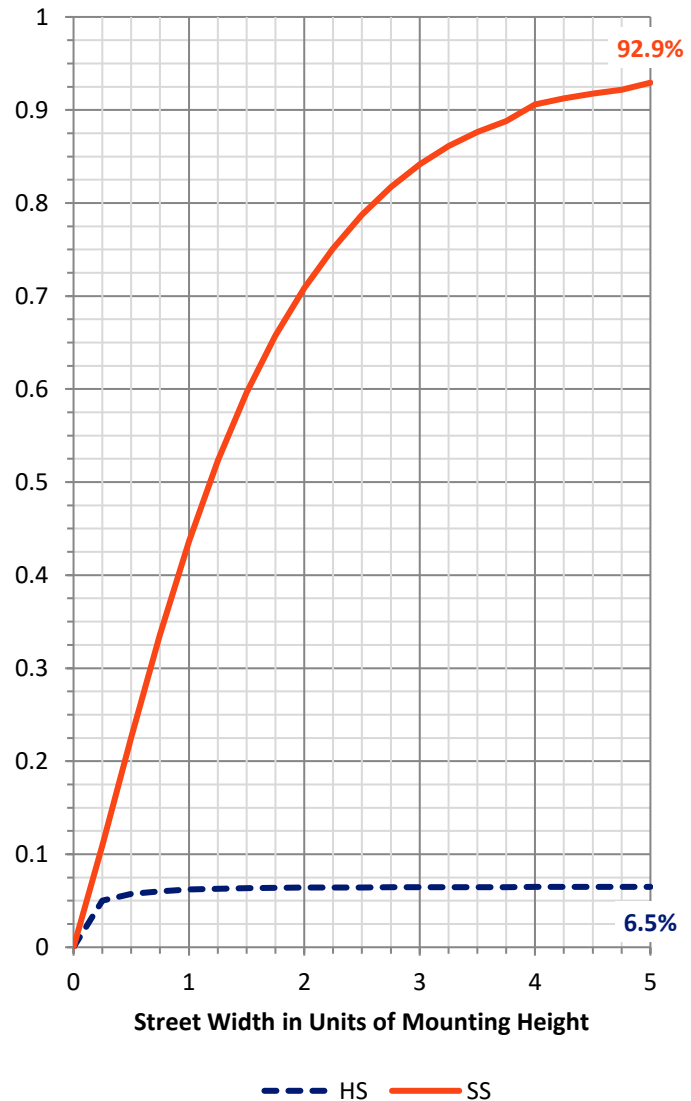
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	722.4	0.0	722.4
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	10300.9	0.0	10300.9
	% Fixture	93.4	0.0	93.4
Total	Lumens	11023.3	0.0	11023.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.5	1.3
10°-20°	347.4	3.2
20°-30°	577.0	5.2
30°-40°	919.7	8.3
40°-50°	1518.0	13.8
50°-60°	2292.5	20.8
60°-70°	2986.3	27.1
70°-80°	2017.9	18.3
80°-90°	221.0	2.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	11023.3	100.0
0°-180°	11023.3	100.0

Coefficient of Utilization



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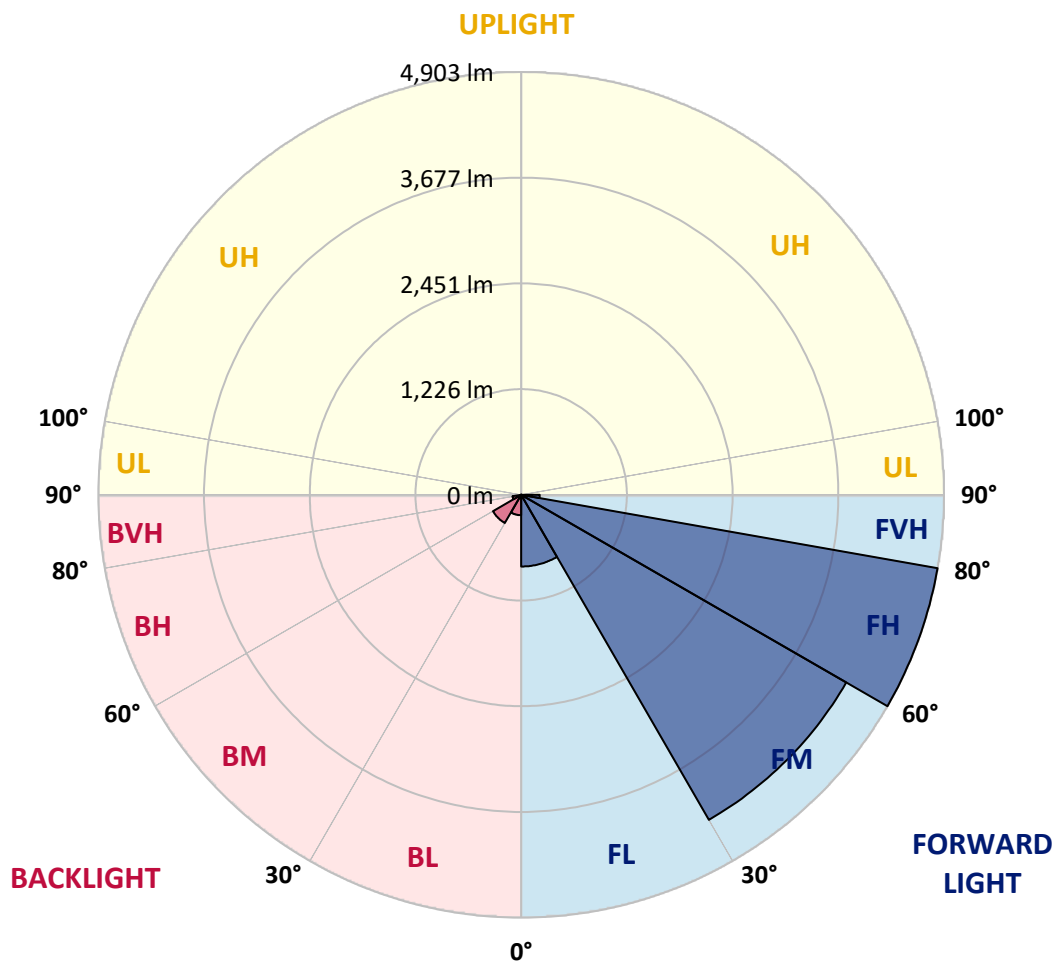
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	831.4	7.5			
FM	(30°-60°)	4352.1	39.5			
FH	(60°-80°)	4902.7	44.5			G2/5000
FVH	(80°-90°)	214.6	1.9			G2/225
BL	(0°-30°)	236.6	2.1	B1/500		
BM	(30°-60°)	378.0	3.4	B1/1000		
BH	(60°-80°)	101.5	0.9	B0/110		G0/110
BVH	(80°-90°)	6.4	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1764.4	1764.4	1764.4	1764.4	1764.4	1764.4	1764.4	1764.4	1764.4	1764.4	1764.4
2.5°	1878.8	1882.2	1877.8	1870.1	1858.8	1851.8	1842.3	1821.6	1795.6	1773.0	1747.0
5°	1893.5	1895.2	1890.0	1875.3	1858.0	1848.4	1836.3	1813.8	1786.9	1755.7	1708.9
7.5°	1897.8	1897.0	1890.9	1872.7	1845.8	1833.6	1812.9	1785.2	1757.4	1728.8	1676.0
10°	1896.0	1896.0	1891.7	1874.5	1844.1	1832.8	1809.4	1779.9	1745.3	1716.7	1660.4
12.5°	1890.0	1893.5	1890.9	1881.3	1858.8	1850.1	1829.3	1799.9	1766.9	1737.5	1677.7
15°	1897.8	1903.0	1908.2	1904.7	1891.7	1884.0	1864.8	1834.6	1807.7	1776.5	1712.3
17.5°	1929.0	1940.2	1952.4	1953.2	1939.4	1925.5	1903.9	1872.7	1846.6	1818.1	1748.7
20°	1987.9	1996.6	2019.1	2023.5	1995.8	1975.8	1945.4	1909.0	1883.0	1858.8	1782.6
22.5°	2075.5	2085.0	2103.2	2097.2	2050.3	2027.0	1988.8	1947.2	1920.4	1906.5	1821.6
25°	2208.0	2210.6	2215.0	2188.1	2111.0	2085.0	2038.2	1991.4	1969.7	1968.0	1877.0
27.5°	2364.0	2367.5	2348.4	2288.6	2178.6	2144.8	2091.9	2049.5	2039.0	2052.0	1947.2
30°	2542.5	2543.4	2490.6	2393.5	2256.5	2219.3	2164.7	2117.9	2127.4	2159.6	2037.3
32.5°	2725.3	2716.8	2643.9	2517.4	2363.1	2318.1	2271.3	2224.5	2252.2	2317.2	2169.1
35°	2892.6	2889.2	2803.4	2656.1	2501.8	2461.9	2428.2	2378.8	2423.8	2529.6	2348.4
37.5°	3059.9	3057.3	2959.4	2806.0	2672.6	2643.9	2618.8	2580.7	2654.4	2809.4	2588.5
40°	3244.5	3240.1	3119.7	2972.4	2871.0	2855.4	2840.6	2824.2	2949.9	3165.6	2887.5
42.5°	3472.4	3453.3	3289.5	3153.5	3089.3	3093.7	3094.5	3111.0	3307.7	3589.3	3240.1
45°	3734.1	3691.6	3460.2	3347.6	3329.4	3355.4	3381.4	3449.8	3724.6	4077.3	3630.1
47.5°	3988.0	3919.5	3656.9	3556.4	3593.7	3647.4	3709.8	3843.2	4192.5	4587.6	3983.7
50°	4206.4	4136.2	3851.9	3768.8	3887.5	3967.2	4078.1	4280.0	4686.4	5019.2	4206.4
52.5°	4377.9	4322.5	4058.1	4002.7	4213.3	4322.5	4496.7	4761.8	5152.7	5303.5	4362.4
55°	4504.5	4476.7	4255.8	4263.6	4575.6	4733.3	4949.9	5249.7	5546.1	5524.4	4479.3
57.5°	4647.5	4625.8	4462.8	4571.2	5011.4	5215.1	5465.5	5706.4	5832.0	5702.1	4593.8
60°	4794.0	4800.8	4714.2	4943.8	5550.4	5775.8	5994.1	6053.9	6077.4	5882.4	4714.2
62.5°	4904.8	4934.3	4942.1	5345.9	6103.3	6295.6	6390.2	6347.7	6342.5	6124.1	4704.7
65°	5032.2	5109.3	5237.6	5787.0	6605.9	6732.4	6800.1	6861.5	6731.6	6196.0	4241.9
67.5°	5252.3	5373.7	5662.2	6327.8	7186.5	7373.7	7565.2	7500.3	6789.6	5465.5	3231.5
70°	5548.7	5696.9	6206.4	7034.0	7974.2	8287.9	8448.2	7449.1	5764.4	3776.5	1704.5
72°	5361.5	5495.8	6374.5	7394.5	8532.3	8820.0	8418.8	6497.6	4178.7	1957.6	571.1
72.5°	5179.5	5318.2	6320.8	7390.2	8587.8	8807.9	8227.3	6122.4	3697.7	1523.5	393.4
75°	3593.7	3768.8	5418.7	6643.1	7755.0	7513.3	6294.8	3707.2	1339.8	261.7	130.0
77.5°	1858.0	1993.1	3286.9	4694.2	5404.9	4949.9	3720.3	1608.4	370.9	138.6	85.8
80°	1151.6	1218.4	1537.3	2312.9	2807.7	2455.9	1641.3	650.0	237.4	82.3	68.4
82.5°	596.2	647.3	968.0	933.3	1037.3	862.2	605.7	544.2	146.5	51.1	70.2
85°	195.9	208.0	594.4	620.4	443.7	298.1	268.6	519.0	42.5	32.9	59.8
87.5°	26.0	30.3	208.9	355.3	218.4	135.2	161.2	182.8	14.7	18.2	16.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1764.4	1764.4	1764.4	1764.4	1764.4	1764.4	1764.4	1764.4	1764.4	1764.4	1764.4
2.5°	1729.7	1718.5	1682.9	1647.4	1606.6	1569.4	1540.0	1520.8	1529.5	1500.9	1505.3
5°	1680.3	1651.7	1573.7	1489.6	1398.7	1313.8	1246.2	1195.8	1186.3	1143.0	1144.8
7.5°	1632.6	1585.9	1459.3	1320.6	1169.8	1047.7	936.8	839.7	805.1	769.6	748.7
10°	1606.6	1542.5	1363.1	1161.3	948.9	769.6	613.6	491.3	440.2	402.9	384.7
12.5°	1614.4	1529.5	1291.2	1016.5	737.4	509.5	346.7	257.4	226.2	208.9	202.7
15°	1640.4	1532.1	1226.2	875.2	536.4	308.5	203.7	174.2	171.5	170.7	169.8
17.5°	1664.6	1534.7	1157.8	727.9	358.7	196.7	163.8	161.2	161.2	161.2	161.2
20°	1689.8	1535.6	1082.4	573.7	235.7	161.2	154.3	152.5	154.3	154.3	154.3
22.5°	1719.3	1541.7	1009.6	423.7	174.2	151.6	147.3	146.5	147.3	147.3	146.5
25°	1755.7	1554.7	930.7	303.3	157.7	145.6	141.3	140.3	141.3	140.3	140.3
27.5°	1804.2	1572.0	838.8	217.5	150.8	139.5	135.2	135.2	135.2	134.3	134.3
30°	1866.6	1592.7	715.8	171.5	143.8	133.5	130.0	130.0	129.1	128.3	128.3
32.5°	1955.9	1626.6	581.4	155.1	136.1	125.6	122.1	123.1	122.1	121.3	120.5
35°	2082.4	1679.4	448.9	146.5	128.3	117.8	114.4	114.4	114.4	112.6	112.6
37.5°	2261.7	1760.0	336.2	137.8	120.5	110.1	105.8	105.8	104.9	103.1	104.0
40°	2483.6	1861.4	243.5	130.0	112.6	101.4	97.9	96.2	94.4	92.7	92.7
42.5°	2750.5	1960.2	182.8	122.1	104.9	94.4	90.1	88.4	84.9	83.2	82.3
45°	3049.5	2065.0	151.6	112.6	96.2	86.6	83.2	79.7	75.4	72.8	71.9
47.5°	3301.7	2129.2	135.2	103.1	87.6	78.9	75.4	70.2	65.0	63.2	63.2
50°	3453.3	2102.4	121.3	93.6	78.9	71.1	66.7	59.8	56.4	54.6	53.7
52.5°	3538.3	2022.6	110.1	85.8	71.1	62.4	56.4	50.2	48.5	46.7	46.7
55°	3596.3	1907.3	97.9	77.9	64.1	54.6	47.7	43.4	41.6	40.7	39.9
57.5°	3651.7	1766.9	86.6	71.1	57.2	48.5	40.7	39.0	35.5	34.7	34.7
60°	3668.2	1573.7	76.2	63.2	51.1	42.5	35.5	32.9	29.5	28.6	28.6
62.5°	3458.5	1252.2	67.6	53.7	45.1	36.4	31.2	27.7	24.2	24.2	24.2
65°	2890.0	850.1	58.1	46.7	39.9	31.2	26.9	22.5	20.8	20.8	20.8
67.5°	2013.1	474.0	49.4	39.9	33.8	26.0	22.5	19.0	18.2	19.0	19.0
70°	907.4	188.0	41.6	32.9	27.7	21.7	19.0	16.5	18.2	18.2	18.2
72°	272.1	100.6	34.7	26.9	22.5	19.0	16.5	15.5	17.3	18.2	18.2
72.5°	201.9	90.1	32.9	26.0	22.5	18.2	15.5	15.5	17.3	18.2	18.2
75°	104.0	61.5	25.2	19.0	16.5	14.7	13.0	14.7	17.3	17.3	17.3
77.5°	81.4	50.2	20.8	14.7	13.9	13.0	12.2	13.9	15.5	15.5	15.5
80°	76.2	32.9	16.5	13.9	12.2	11.3	11.3	12.2	13.9	14.7	14.7
82.5°	77.1	26.9	14.7	13.0	11.3	10.4	10.4	11.3	13.0	13.9	13.9
85°	49.4	18.2	13.0	11.3	10.4	9.5	9.5	10.4	12.2	13.0	13.0
87.5°	16.5	13.9	11.3	10.4	8.7	8.7	8.7	8.7	10.4	11.3	12.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)